Reception and KS1 Maths Workshop

The aim of today is to share with you how we teach number in KS1 at Horrington, so that you are then confident in supporting your child at home.

The language of maths

add   plus   sum   total

subtract   altogether

take away   difference   minus

equal   multiply   divide   lots of

group   half   share   partition

What do we teach for number in KS1 Maths?

- Number bonds from 10 and 20 e.g. 7+3=10, 18+2= 20
- Related facts e.g. 20-2=18
- Basic multiplication (2,5,10, 3)
- Basic division (2, 5, 10, 3)
- Fractions (½ , ¼, ¾, 1/3, 2/3)
- Addition and subtraction to 100
- Place value (units, tens and hundreds), e.g. what is 12?
- Problem solving

Which concrete apparatus do we use?

- Objects – dinosaurs / teddies
- Numicon
- Counters
- Unifix / Multilink cubes
- Dienes
- Dominoes
- Dice
- 100 square
- Number line
- Number cards
- Part-part-whole models
- Ten frames
- Bead bar / string

How do we teach maths?

- We use the concrete – pictorial – abstract (CPA) sequence of teaching.

- This means that we start with the real object, then move on to the pictorial version, and then numbers.

- 4 calculations: addition, subtraction, multiplication and division.

- Using the resources here and working through the CPA approach, I will demonstrate each calculation.
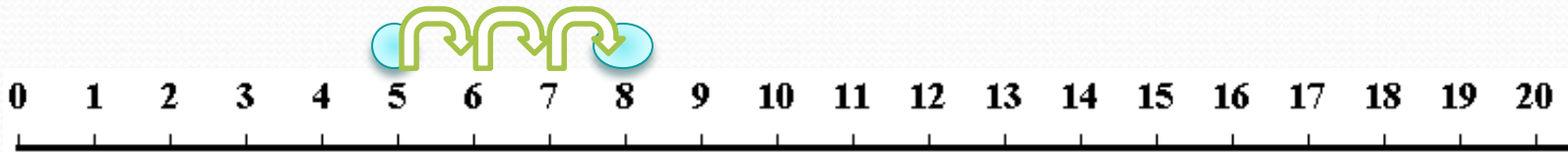
Addition

- Objects and numicon.

- Combine both groups and find the total.

- Count on to find the total.

- Use our number bonds to aid our calculation and then find the total.
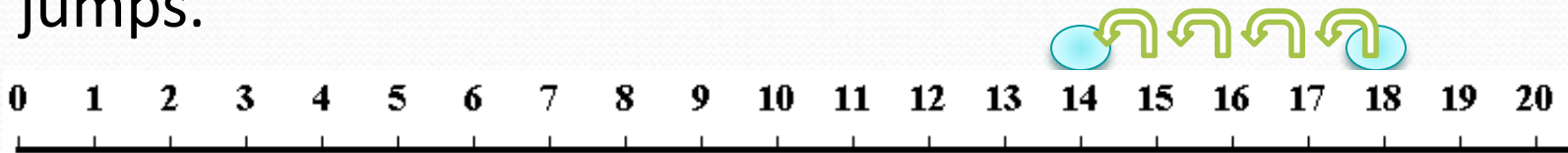
- Partitioning

Subtraction

- Cubes and number line.

- Take away and find how many left.

- Count back to find the amount left.

Using a Number Line

- Adding 5 + 3 = 8
- Step 1 start on the biggest number and count on in jumps.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

- Subtracting 18- 4=
- Step 1: start on the biggest number and count back in jumps.

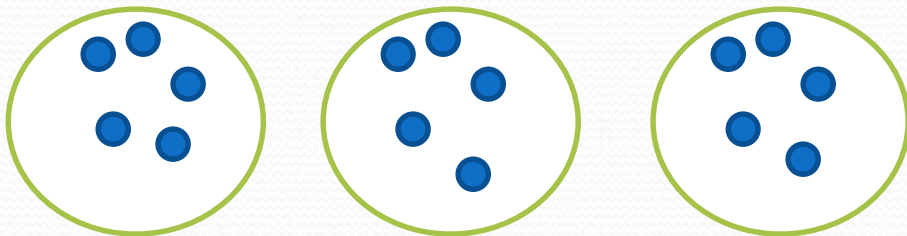| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

Multiplication

- Numicon and 100 square.

- Repeated addition – add all groups to find total.

- Using the language of lots of.

- Introducing the multiplication symbol.

- 2x   3x   5x   10x

- Missing numbers.

Multiplication in ks1

- First, recognise that multiplication is repeated addition
- N<u>o</u> of lots   how many per group   total

- ###   3   x   5   =   15

- Is the same as 3 lots of 5 or 5 + 5 +5 = 15
- Use pictorial cues to represent a x sum.
- Encourage them to write the sum:

-     5   +   5   +   5   =   15

Division

- Objects and drawing.

- Sharing – how many groups of 2 can I make with 6 sweets?

- Introducing the division symbol.

- Related facts to divide e.g. 3x4=12, 4x3=12, 12÷3=4, 12÷4=3.